

Editorials

Medical Education for Today's Practice

MEDICAL EDUCATION for today's practice is of the greatest importance to the medical profession, but it is also of importance to other health professions that share at least part of the theory and the practice. Yet there is much dissatisfaction with medical education within the medical profession and elsewhere, and the dissatisfaction is growing. Admittedly, the task of selecting a person who both wants to be a physician and who will prove to be a good one ten years down the road has so far defied objective description. Most of those accepted into medical schools are well qualified according to the existing criteria, and most do turn out to be conscientious, competent physicians when their training is complete. This completeness is temporary at best, however, if it is not augmented by a lifetime of continued learning and hands-on practice experience. The rapid pace of today's medical progress brooks of nothing less.

But as this modern medical progress was establishing its rapid pace, largely during the present century, some structural anomalies in medical education stemming from the reforms of the early 1900s have become more and more firmly entrenched, and their separate and somewhat special interests tend to be increasingly divisive of the whole. There is danger of losing sight of what medical education is all about—that is, training persons to be physicians competent to take care of patients in the technologic, social, economic, and political health care environment of the day. To be sure, there are other specialized roles that are appropriate for well-trained physicians. Some must do research, some must teach—although this is seldom a full-time occupation—and some must fill important administrative positions in the public and private sectors of the health care system. Some manage to successfully combine one or more of these roles. But the main purpose of all medical education should still be to train men and women to be competent physicians through a lifetime of practice in caring for patients and in health care of the public as this may be more broadly defined.

Now, what might be some of these anomalies that may be divisive in medical education? There may be at least two sets of them. One is the now time-honored separation of the undergraduate, graduate, and continuing segments of what is more realistically an educational continuum over a lifetime of training and practice. Each segment is conducted more or less independently of the others, and each has different goals and to a great extent different sponsorship. In many ways they are quite independent of one another, and often the emphasis is on a scientific discipline rather than on the knowledge, skills, and experience needed to competently care for patients in today's practice world. Another set of what might be called anomalies occurs within medical schools, where the preclinical years are largely separated from the clinical years, and both are considerably shielded from first-hand experience in patient care as it happens in daily practice. Most of the teaching in many medical schools is done by academic faculty who are often engrossed in their own admittedly important specialty and research interests. The preclinical years are usually the responsibility of the basic scientists, and for the clinical years the clinical science departments have the responsibility. And much of what is

taught and learned was not known ten years ago, and much of it will need to be replaced perhaps ten years hence.

It seems that in many ways and in many medical schools it is the student who gets short shrift in all of this. Many faculty have conflicts of interest when it comes to teaching students, and what students are being taught at the convenience of the faculty may be what they will never need to know except to pass examinations given by the faculty or by boards made up largely of faculty from various medical schools. These phenomena tend to persist through graduate training, although practice experience within a specialty receives more attention. Nevertheless, students may not be as well prepared for practice when they finish their training as they thought they would be, and this may be because their teachers at both undergraduate and graduate levels were really not well qualified to teach them what they needed to know to prepare for medical practice in the changing scientific, technologic, social, economic, and political world of health care in which they find themselves today. There are disturbing signs that many young physicians now in their early years of practice are in fact not well prepared and are not always coping well with stresses in the quite different, even unexpected, practice environment in which they are trying to conduct themselves. At the very least, one might say that here might be room for some improvement in the continuum of medical education for patient care, with more of a contribution from the practice environment at all levels of medical education.

MSMW

The Nature and Evolving Treatment of Myelodysplastic Syndromes

THE MYELODYSPLASTIC SYNDROMES (MDS) provide a clinical setting for evaluating the evolution of a relatively benign chronic hematologic disorder into a frankly malignant disease similar to acute myeloid leukemia (AML). Primary myelodysplasia, which occurs predominantly in the elderly, and secondary myelodysplasia, occurring with increasing frequency following cytotoxic chemotherapy for other tumors, are disorders that are becoming more common as the population ages and tumor therapy becomes more effective. Major advances in understanding the biologic abnormalities in MDS have recently led to new therapeutic approaches that attempt to alter the possible pathogenetic mechanisms underlying these disorders.

In view of these developments, the review of MDS by Doll and List elsewhere in this issue provides a timely and careful compilation of data regarding the diagnostic and prognostic categorization, hematologic abnormalities, cytogenetic findings, and a discussion of some of the possible pathogenetic mechanisms fundamental to MDS. Patients with these syndromes are characterized clinically by having refractory cytopenias with associated cellular dysfunction and characteristically abnormal morphologic features of the marrow, which demonstrates specific defective myeloid maturation with dysplasia of at least two and generally three hemopoietic cell lines, suggesting a pathologic involvement of the pluripotential hemopoietic stem cell. In approximately 10% to 40% of these patients, the disorder evolves into AML, whereas the majority of these patients have morbidity